FW: Waimanalo Gulch McLeod, Cindy to: Stephen Tyahla 04/04/2011 10:36 AM Show Details

History: This message has been replied to. Hello Stephen,

The long awaited review of the Geosyntec Consultants Waimanalo Gulch report is complete. The E&E Principal engineer's conclusion that the report meets industry standards is attached below. Please let me know if you have any questions. I thank you for your patience on this!

## Regards,

Cindy McLeod, Program Manager

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**From:** Heins, Thomas R.

Sent: Monday, April 04, 2011 10:17 AM

To: McLeod, Cindy

Cc: Albers, Dave; Sargent, Pamela; Whitman, Zander

Subject: Waimanalo Gulch

Cindy – The email below is for Stephen Tyahla at USEPA. Thanks, Tom

Mr. Tyahla,

As requested I reviewed "Waimanalo Gulch Landfill Slope Stability Analysis and Work Plan for Temporary Earthen Berm Integrity" by Geosyntec Consultants dated February 2, 2011. The report was compared to general industry practice for evaluation of slope stability as presented in DESIGN OF SMALL DAMS, UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF RECLAMATION and DESIGN AND CONSTRUCTION OF LEVEES, U.S. Army Corps of Engineers, EM 1110-2-1913. Based on this review the letter report appears to be prepared in accordance with standard industry practice in the US for the evaluation of the stability of existing temporary earthen embankments. In making this evaluation, as requested by EPA, E&E accepted the assumptions and data in the letter and did not review the calculations and computer analysis.

Thanks,

Tom

Thomas R. Heins, P.E, Principal

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